

Abstract:

An absorption chiller having a protection system for preventing the chilled water in the evaporator tubes from freezing in the event the water flow through the tubes closes down while the machine is running. A sensor in the evaporator heat exchanger is arranged to detect when the water flow through the heat exchanger tubes close down and signals the machine controller. The controller, in turn, shuts down the machine and opens a valve in a feed line to the evaporator to deliver a high temperature working fluid from another section of the machine to the evaporator to maintain the temperature in the evaporator above that at which the water in the tubes freeze.